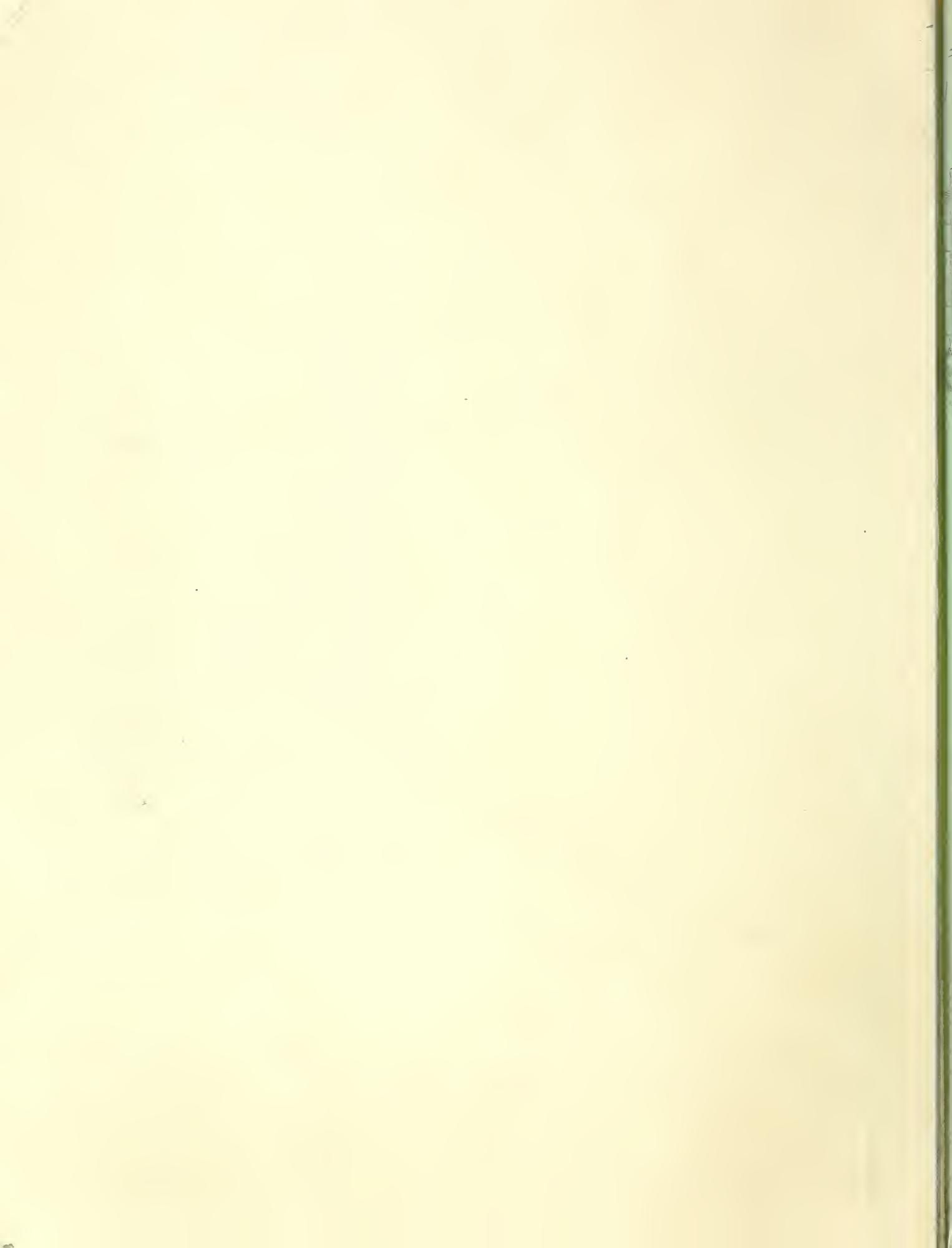


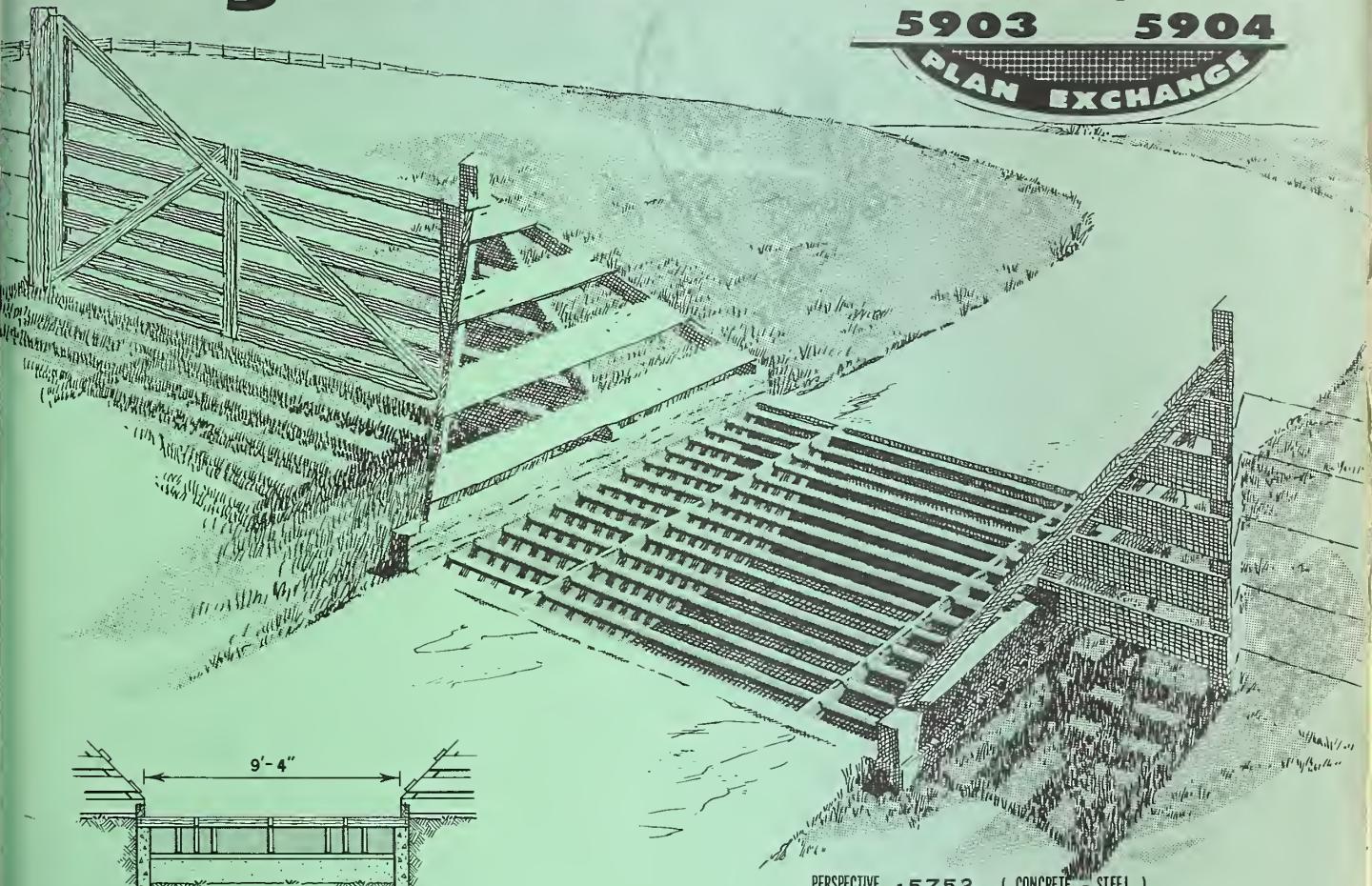
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



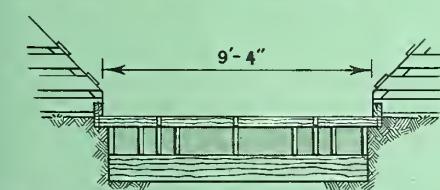
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#831

Cattle guards



PERSPECTIVE - 5752 (CONCRETE - STEEL)

CROSS SECTION - 5904 (CONCRETE - WOOD)



CROSS SECTION - 5903 (WOOD)

Large-scale working drawings may be obtained through your county agent or from the Extension agricultural engineer at most State agricultural colleges. There is usually a small charge.

ORDER PLAN BY NUMBER AND TITLE

If the large-scale drawings are not available in your State, write to the U.S. Department of Agriculture, Agricultural Engineering Research Division, Plant Industry Station, Beltsville, Md. The U.S. Department of Agriculture does not distribute drawings, but will direct you to a State that does distribute them.

Cattle guards are intended to permit passage of pedestrians and wheeled vehicles, while discouraging livestock from attempting to cross. Animals will not try to cross this slatted structure because it poses a potential danger to the safety of their limbs. Because the animals either refuse to cross or exercise extreme caution if they do attempt to cross, these guards are quite safe and humane.

The cattle guard cannot be effectively used in a farmyard where livestock are held in heavy concentrations and may be crowded onto the guard. Neither is it effective where the stock will be excited or forced in any other way. The design of the guard makes it important that the animals have an opportunity to study it at leisure so they can evaluate the danger of trying to pass through the fence at the location protected by the guard. Crossing could be accomplished by animals that can jump the 9-foot span of the pit, by animals with feet large enough to safely bridge the pipe set 7 inches on center, or by delicately sure-footed animals like goats.

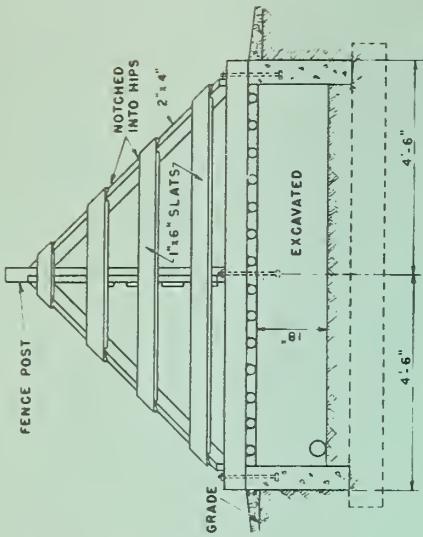
A small-scale copy of Plan 5752, constructed of concrete and steel, is shown on the back of this sheet. For a guard built of concrete and wood, order Plan 5904; and for one built entirely of wood, order Plan 5903. There is one sheet in each plan.

Washington, D.C.

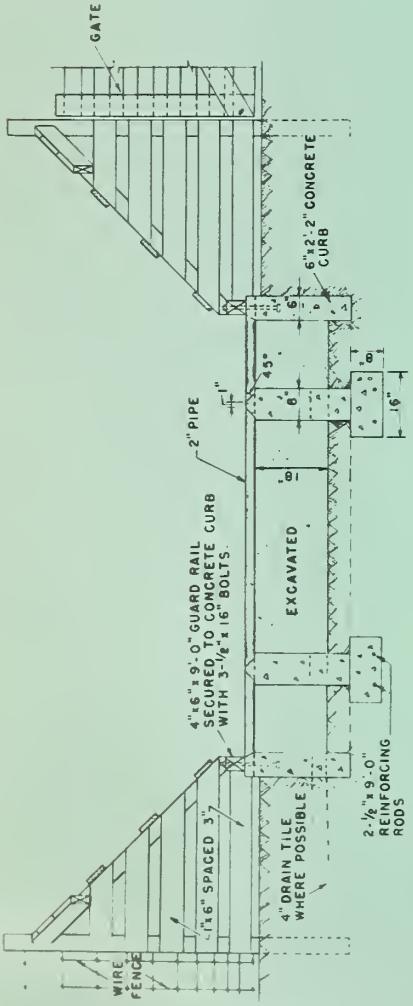
December 1960

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SECTION A-A

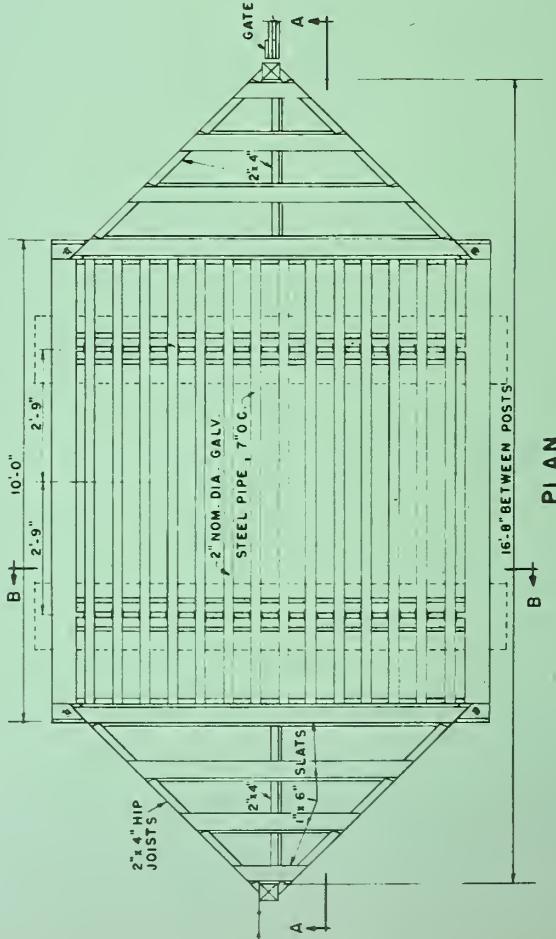


SECTION B-B

BILL OF MATERIALS

LUMBER FRAMING:	1- PCS 2 1/4" X 12'-0"
SLATS:	2- " 2 1/4" X 14'-0"
GUARD RAILS:	6- " 1 1/2" X 12'-0"
CONCRETE:	2 3/4 CU YDS. (1:3:5 MIXTURE)
CEMENT:	4 1/2 SACKS
SAND:	1 1/4 CU YDS
AGGREGATE:	2 3/5 CU YDS
MISCELLANEOUS PIPES	14- PCS. 2" NOM. DIA. EXTRA STRONG GALV
ANCHOR BOLTS	STEEL PIPE OR RAILS, 10'-0" LONG
REINF. RODS	4- 1/2" Ø X 16"
	4- 1/2" Ø X 9'-0"

NOTE: A WIDE GATE ADJACENT TO GUARD IS SUGGESTED FOR
PASSAGE OF EXTRA WIDE EQUIPMENT AND LIVESTOCK
ALL WOOD TO BE TREATED WITH PRESERVATIVE



PLAN



